

Title (en)
Doctor arrangement

Title (de)
Schaberanordnung

Title (fr)
Dispositif de raclage

Publication
EP 1186703 B1 20051109 (DE)

Application
EP 01118943 A 20010804

Priority
DE 20014746 U 20000825

Abstract (en)

[origin: EP1186703A2] The scraper assembly, to clean a roller or cylinder in a papermaking machine, has a scraper blade carrier (6) with a stiffness across the width which is at least 1.5 times that along the length. The scraper blade carrier (6) is of a plastics material, with reinforcement fibers of carbon or glass or plastics, and with a constant profile along its length. The scraper blade carrier (6) swings on an axis (8) at a blade holder (7). At least one pressure unit (9,10) is between the blade carrier (6) and the holder (7) which is automatically matched, irrespective of pressure. A pressure unit (9,10) is preferably on both sides of the swing axis (8), as a hose with an inlet (12) on the side towards the blade carrier (6) to accommodate a push rod (13) at the carrier (6). The inlet (12) is held in a state of balance, with the blade carrier (6) and holder (7) parallel to each other, with a depth which is at least 30% of the height (h) of the pressure units (9,10). The push rods (13) extend further in the direction of the blade holder (7) than the gap between the blade carrier (6) and the axis (8). A support (11) is at the sides of the hose without the inlet (12), using a U-shaped structure at the blade holder (7). The pressure units can be eccentrics, rotating parallel to the axis (8) on a shaft operated outside the blade holder (7). The shaft is under spring tension. Or the pressure unit is a spring, with a preset tension, as a leaf spring fitted to a rotating shaft at one edge. The gap (b) between the free edge of the scraper blade (2) and the axis (8) is at least five times a gap (a) between the axis (8) and the force application point of the pressure unit (9) away from the blade. A projected extension (14) of the blade (2) runs through the axis (8) or a zone between the blade carrier (6) and the axis (8). The scraper blade (2) has a free width (d) which is max. 2.5 times a gap (c) between the end of the carrier (6) on the blade side and a clamping point (15) of a blade holder (5), which has an effective opening (16) which, at max., is twice the thickness (s) of the blade (2). The blade (2) has a holding width (f) which is at least as large as the gap (c) between the clamping point (15) and the carrier (6). The blade holder (5) has a flap swing action at the carrier (6) and, when closed, can be locked to the carrier (6) by a lock which grips through the blade carrier (6).

IPC 1-7
D21G 3/00

IPC 8 full level
D21G 3/00 (2006.01); **D21H 25/10** (2006.01)

CPC (source: EP)
D21G 3/005 (2013.01); **D21H 25/10** (2013.01)

Cited by
US7867364B2; WO2008022096A1; US7665178B2; US8321992B2

Designated contracting state (EPC)
DE FI SE

DOCDB simple family (publication)
DE 20014746 U1 20001019; DE 50107966 D1 20051215; EP 1186703 A2 20020313; EP 1186703 A3 20020918; EP 1186703 B1 20051109

DOCDB simple family (application)
DE 20014746 U 20000825; DE 50107966 T 20010804; EP 01118943 A 20010804